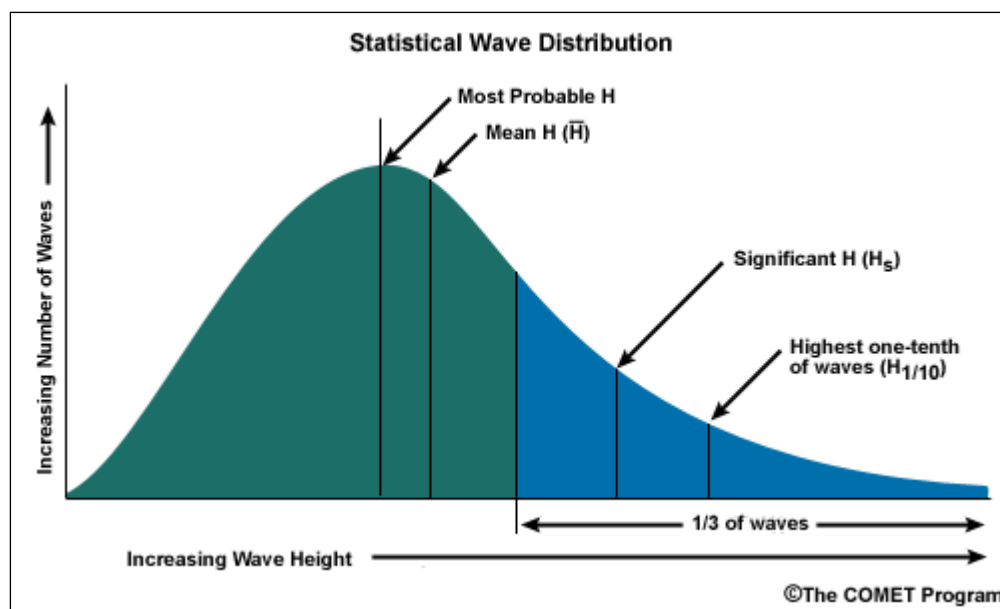


New Enhancement is coming to the Coastal Waters Forecast: Rayleigh Distribution



NWS is seeking user comments on the Experimental Enhanced Coastal Waters Forecast Using [Rayleigh Distribution for Wave Heights](#) through September 30, 2015. The NWS Weather Forecast Office (WFO) in Brownsville will begin testing an experimental enhancement to its Coastal Waters Forecast (CWF), additional wave height fields using the theoretical Rayleigh Distribution (pictured above) starting in early October 2014.

Several different wave statistics can be inferred from this distribution. Among these, the Significant Wave Height (H_s) and the average height of the highest 10 percent of waves ($H_{1/10}$) observed at sea, approximately 1.272 times the significant wave height.

The current CWF product provides a forecast range of the expected H_s across the coastal waters. H_s is defined as the average height of the highest 1/3 of the waves. For example:

TONIGHT...SOUTHEAST WINDS 10 TO 15 KNOTS BECOMING NORTHWEST 15 TO 20 KNOTS LATE. SEAS 2 TO 4 FEET BUILDING TO 4 TO 6 FEET LATE. A SLIGHT CHANCE OF SHOWERS.

Adding the $H_{1/10}$ wave height to the CWF product will provide a more descriptive and accurate assessment of the wave field expected for any particular time across a given marine zone. User knowledge of this information could reduce the number of marine accidents at sea, saving lives. This new information will follow this template:

HS with occasional $H_{1/10}$ SEAS POSSIBLE.

For example:

*.TONIGHT...SOUTHEAST WINDS 10 TO 15 KNOTS BECOMING NORTHWEST 15 TO 20 KNOTS LATE. SEAS 2 TO 4 FEET WITH **OCCASIONAL 5 FEET** BUILDING TO 4 TO 6 FEET WITH **OCCASIONAL 8 FEET POSSIBLE** LATE. A SLIGHT CHANCE OF SHOWERS.*

These additions will be made available as part of the routine forecast provided online at:

<http://weather.gov/rgv>

<http://weather.gov/rgv/?n=marine>

The new CWF will be broadcast over NOAA Weather Radio All Hazards, in [English](#) and [Spanish](#). NWS will *not* provide this information through the point and click format. Please provide comments regarding this CWF enhancement at:

www.nws.noaa.gov/survey/nws-survey.php?code=SRERD

Comments will be solicited through September 30, 2015. During this comment period, a proactive effort will be made to educate users and partners of the product availability and use.